Speaker: Professor Foster Provost, New York University

Date: Friday, February 14, 2014

Time: 10:30 am - 11:30 am

Location: Room 1330

Title: Predictive Modeling for Customer Prospecting via Online Display Advertising

Abstract: The era of "big data" has brought marketers and advertisers the opportunity to base decision-making on predictive models fueled by massive data on consumer behavior. In this talk I will discuss developments in applying predictive modeling methods at massive scale for "customer prospecting" via display advertising. Display advertising can be divided roughly into retargeting and prospecting. Prospecting involves showing display advertisements to online consumers who never have been observed to have taken a brand action. The goal is for consumers to convert shortly after having seen the advertisement. I will discuss modeling based on fine-grained data on consumer behavior. I will describe a new "sort-of-supervised" method of dimensionality reduction to coalesce related behaviors. Besides helping to manage the modeling with massive data, the resulting dimensions give insight into what are the behaviors that affect predictions for different brands. Time permitting, I also will illustrate the concept of "transfer learning" in action, since for prospecting the ideal data for learning models are quite expensive, but there are useful data that not.

Bio: Foster Provost is Professor and NEC Faculty Fellow at the NYU Stern School of Business and is coauthor of the O’Reilly best-selling book, Data Science for Business. His research is widely read and highly cited and has won many awards. He has co-founded several successful companies focusing on data science for advertising. From 2004-2010 Foster was Editor-in-Chief of the journal Machine Learning.